

# **Importance of DEP PIP program to citizens**

*Lessons learned from several disposal site  
cleanups*

MassDEP BWSC Advisory Committee Meeting  
Wednesday, Nov. 14, 2018

**Linda Segal, WSCAC member and former PIP  
participant**

## **THREE PIP SITES**

- **FORMER DOW CHEMICAL, WAYLAND 1993-2000**
- **FORMER RAYTHEON, WAYLAND 2000-PRESENT**
- **NEW ENGLAND SAND/GRAVEL, FRAMINGHAM  
1993-PRESENT**

# Town of Wayland Wellhead Protection



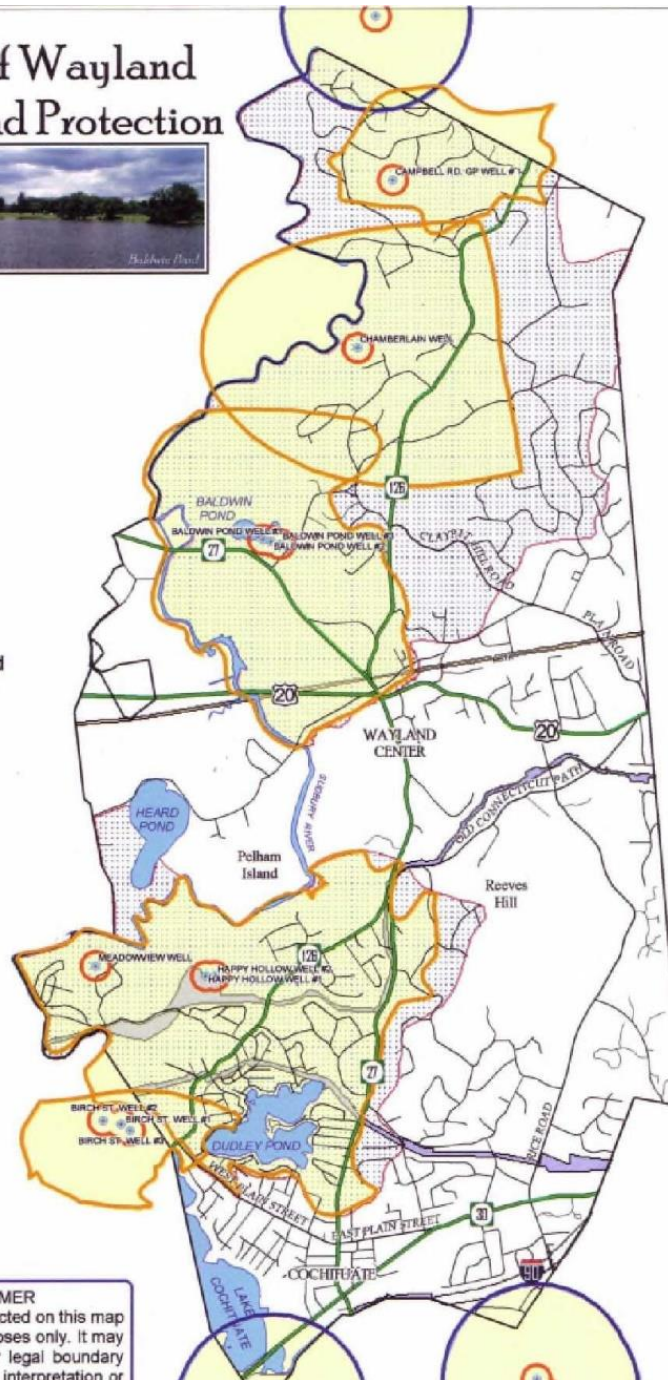
Baldwin Pond



Survey Department  
Wayland GIS  
41 Cochituate Rd.  
Wayland, Mass 01981  
May 7, 2001

## Legend

- Wellhead
- Zone I
- Zone II
- IWPA
- APD
- MWRA



**DISCLAIMER**  
The information depicted on this map is for planning purposes only. It may not be adequate for legal boundary definition, regulatory interpretation or



# **RTN 3-3866 Former Dow Chemical 412 Commonwealth Rd., Wayland MA**

- **Tier IA, PIP site March 1993**
- **Class A2 RAO March 2000**
- **Town purchased 28+ acres May 2000**
- **Renamed Loker Conservation/Recreation Area**
- **JSI case study, 2004 “From Confrontation to Collaboration”**

**[https://www.jsi.com/JSIInternet/Inc/Common/\\_download\\_pub.cfm?id=10289&lid=3](https://www.jsi.com/JSIInternet/Inc/Common/_download_pub.cfm?id=10289&lid=3)**

# From Confrontation to Collaboration: A Case Study of the Dow Chemical Company Hazardous Waste Site Wayland, Massachusetts

January, 2004



By Anne Marie Desmarais, MSPH, LSP  
and Irwin Silverstein, Ph.D., P.E., LSP

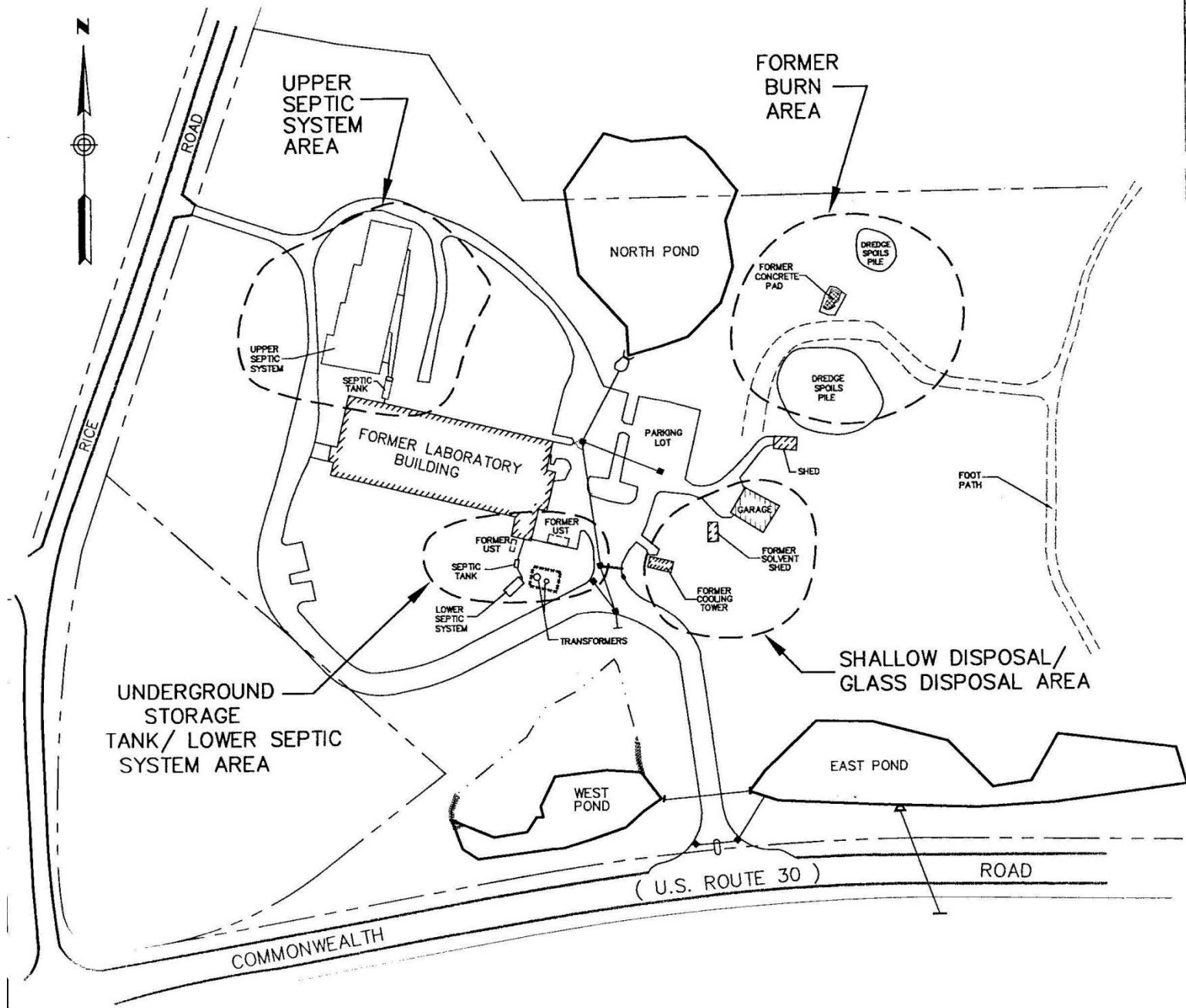
In Collaboration with the NED/DOW Neighbors Group



**JSI Center for Environmental Health Studies**  
44 Farnsworth Street, Boston, MA 02210  
(617) 482-9485, <http://www.jsi.com>









# FORMER DOW CHEMICAL, WAYLAND

## *Thanksgiving 1991 – Phase I report*

- discovery of possible problem
- identifying risk to health & environment
- struggle to access information
- role of government – mixed expectations
- competing interests
- public's right to know
- lack of trust
- confrontation vs. communication
- negative branding
- selective use of information



# **FORMER DOW CHEMICAL, WAYLAND**

## **CITIZEN CHALLENGES**

- **grass roots organizing**
- **sustaining grass roots effort – unknowns**
- **sharing & carrying the load**
- **daunting learning curve**
- **LSPs, risk assessment consultant, attorney**
- **networking with environmental organizations**
- **educating community**
- **grant writing**
- **paying the bills / pro bono**
- **personal: work, family, time, pocketbook**

# Getting Started with DEP PIP Program

- 1993 DEP privatized cleanups
- 500 pages MCP regulations
- more politically neutral playing field
- new process, new foreign language
- science and acronyms overwhelming to citizens
- need for technical assistance
- before internet, same day communication = fax
- networking to find help
- PIP petition and PIP Plan
- TAG (Technical Assistance Grants)

## **Citizens' Concerns Finally Validated**

- **1994 RAM site investigation**
- **130 vials excavated, multicolored contents**
- **Feb. 1995 Dow resumed property ownership**
- **Refused to test vials – proprietary information**
- **1994-1999 Four DEP TAG grants, NEGEF grant**
- **Risk Assessment process**
- **1998 Town Meeting & Ballot Votes**
- **1999 Vials Destroyed, Citizens' Letter to Dow CEO**
- **1999-2000 Site Work Beyond PIP Plan**
- **2002 JSI Stakeholders Meeting**
- **2004 JSI Case Study – Lessons Learned**

# LESSONS LEARNED

- Establish stakeholders communication early
- Establish common goals early
- Clarify MCP for stakeholders
- Maintain stakeholders meetings
- Clarify DEP & DPH roles
- Municipality roles & expertise
- Transparency & Trust
- Risk communicator vs. public relations
- Maximize information technology tools
- Changes over time
- Commitments for win-win outcomes



# **ESSENTIAL TOOLS OF PIP PROGRAM**

- **DEP PIP Coordinator**
- **DEP project manager**
- **PIP Plan – essential roadmap**
- **PIP meetings – communications forum**
- **LSP technical assistance**
- **TAG grants**
- **PIP repository**
- **DEP file review**

**RTNs 3-22408, 3-13302**  
**Former Raytheon Facility**  
**430 Boston Post Rd. Wayland MA**

- **Tier IB, PIP site June 2000**
- **<http://raytheon.erm.com/home.htm>**
- **Mixed-use project redevelopment 2012+**

# **RAYTHEON CLEANUP**

## ***APPLYING LESSONS LEARNED***

- **Zone II – protect Baldwin drinking water wells**
- **DEP investigation between Raytheon & Baldwin**

### **Town steps after Raytheon ceased operations 1995:**

- **Town acquired wastewater treatment plant**
  - **Appointed a town center committee**
  - **2000 DEP Tier I classification**
  - **June 2000 PIP petition included selectmen**
  - **PIP meetings twice a year**
  - **Stakeholder meetings**
  - **2002 Selectmen MOU for LSP services**
- 
- **2000 DEP PIP Plan, revised 2004**
  - **Two PIP Repositories**



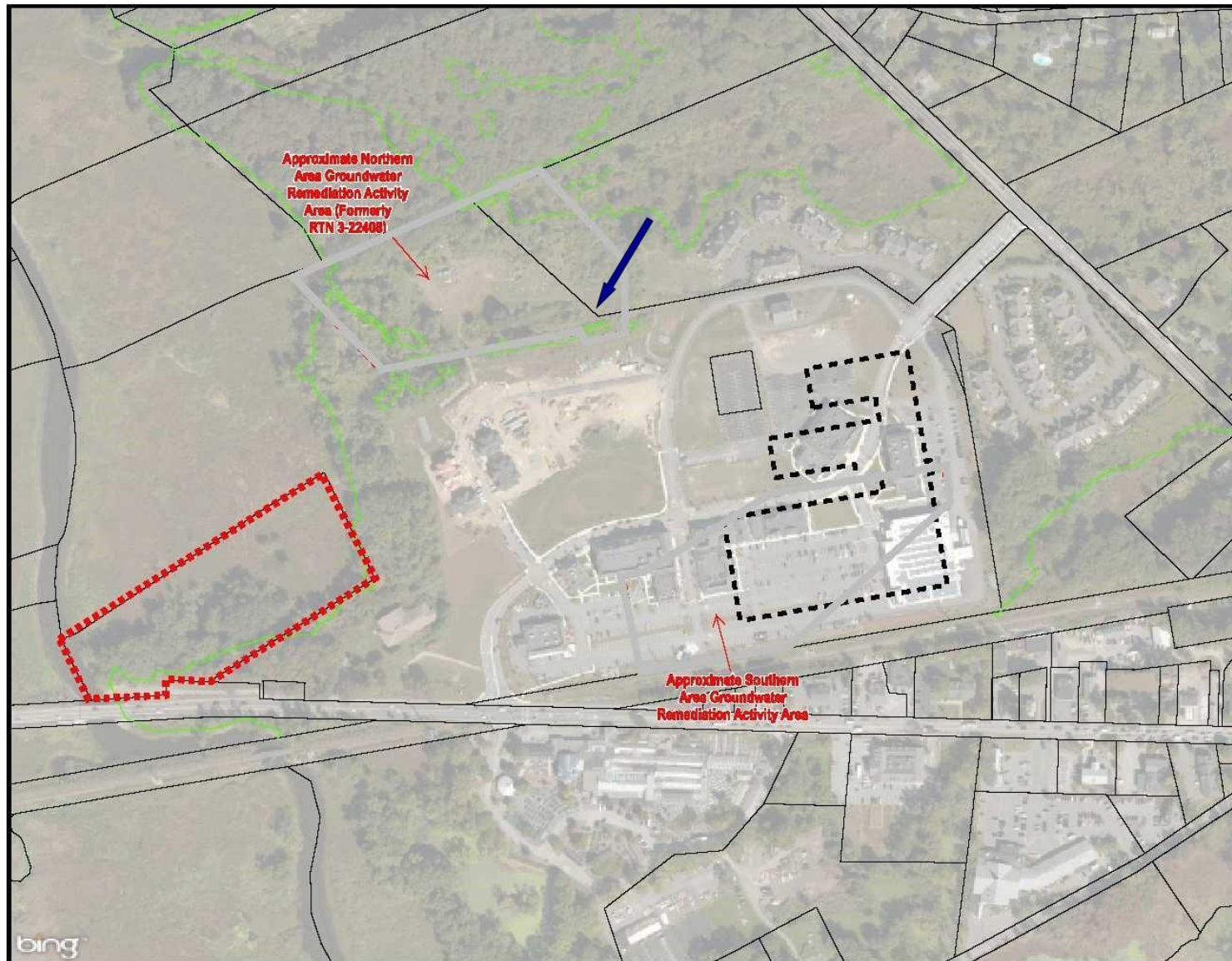


# RAYTHEON LEADERSHIP ROLE

- June 2005 meeting w/selectmen
- Raytheon leading communication
- Explaining PIP Plan, MCP process
  - Public Comment process
  - LSP roles
  - Raytheon website [www.ermne.com](http://www.ermne.com)

## PROPERTY IN TRANSITION

- August 2002 Polaroid left
- Facility & parking areas almost vacant
- Raytheon site investigations continue
- State-of-the-art technologies
- 2-acre wetlands cleanup & restoration
- 2005 Mixed Use project & housing proposed



#### Legend

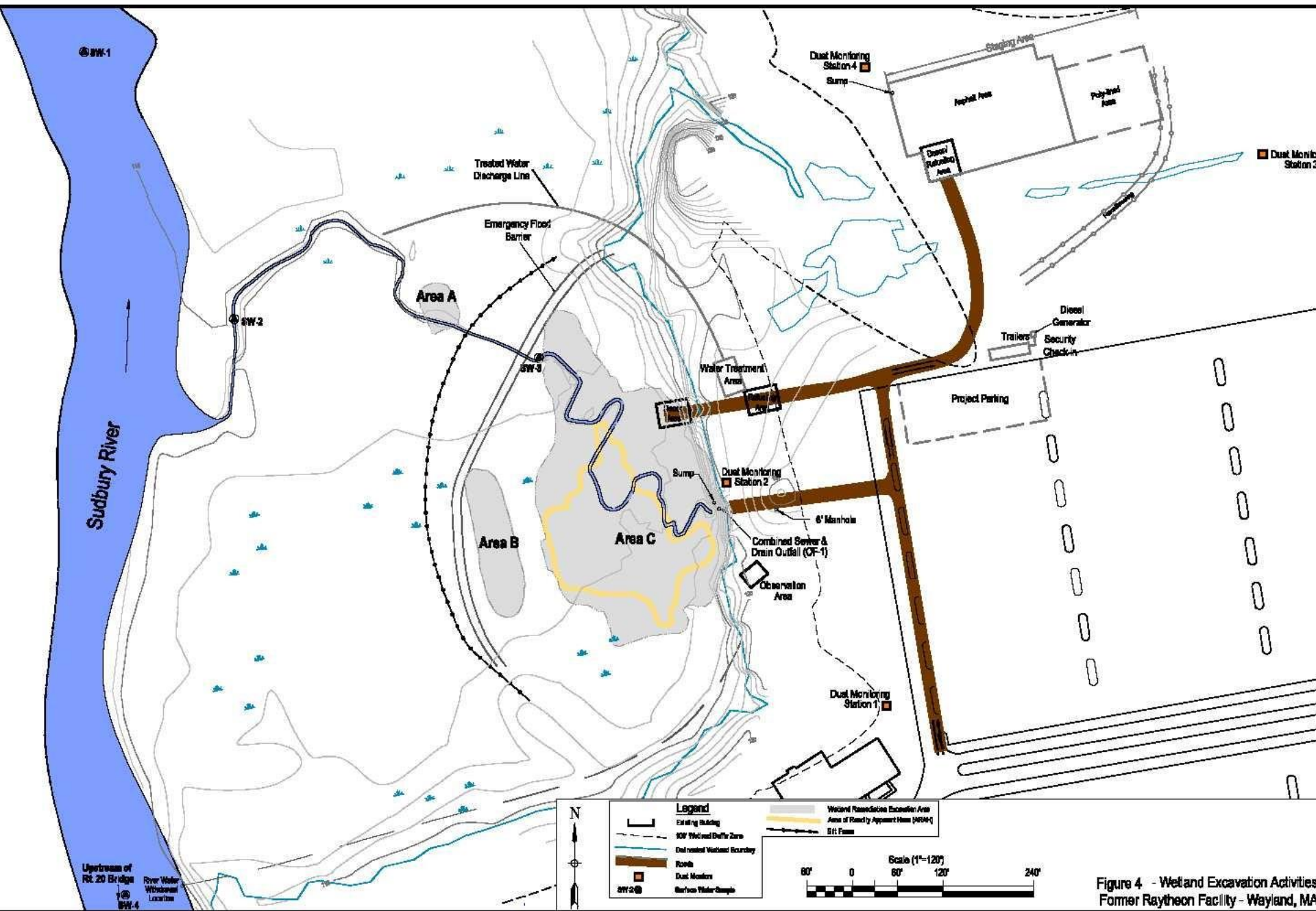
- Disposal Site Boundary
- Approx. Footprint of Former Raytheon Building
- Delineated Wetland Boundary
- Parcel Outlines



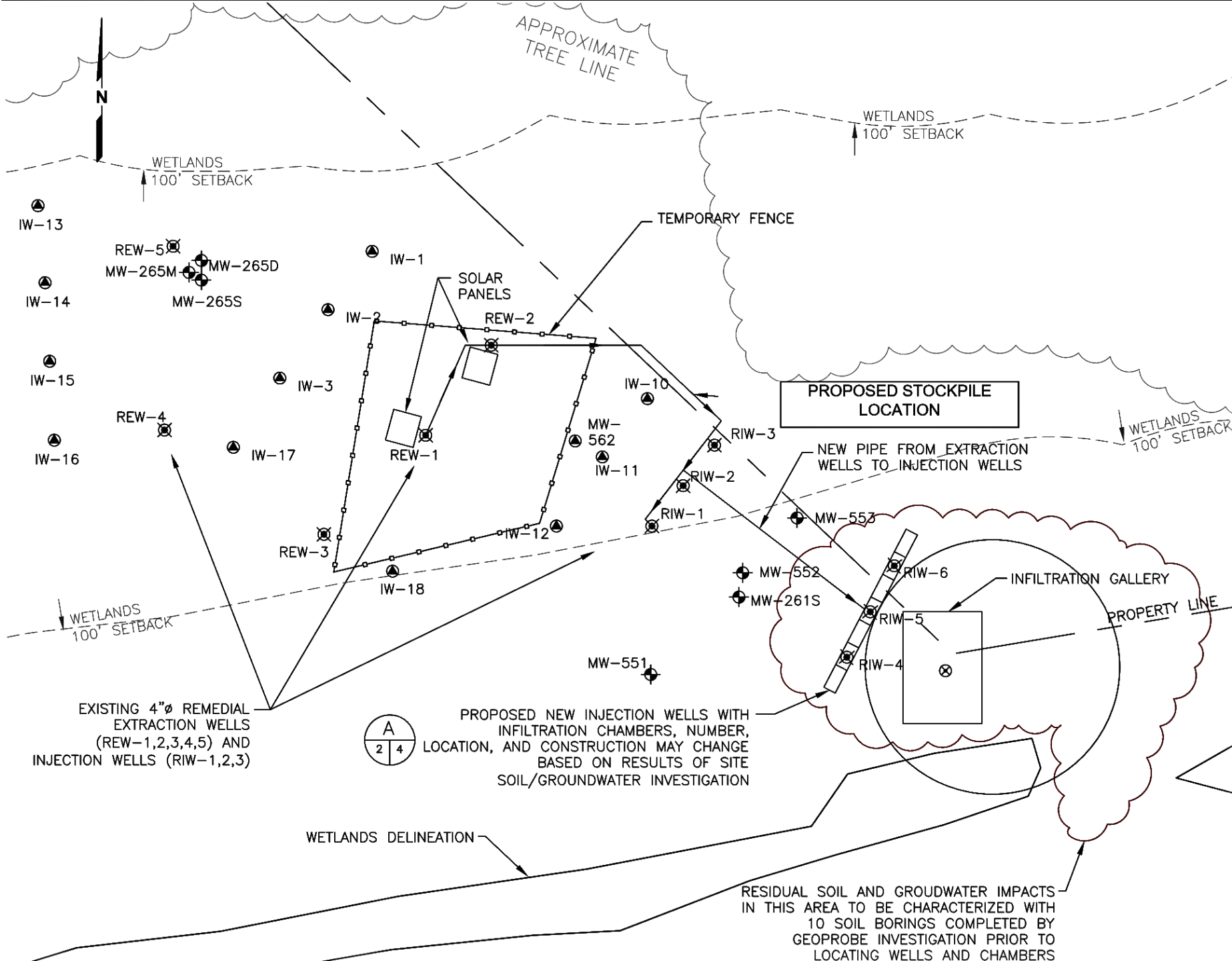
0 50 100 200 300 400 500  
Feet

**Figure 2: Disposal Site Area**  
**Site Plan**  
 Former Raytheon Facility  
 Wayland, MA  
 Hamlen Parcel







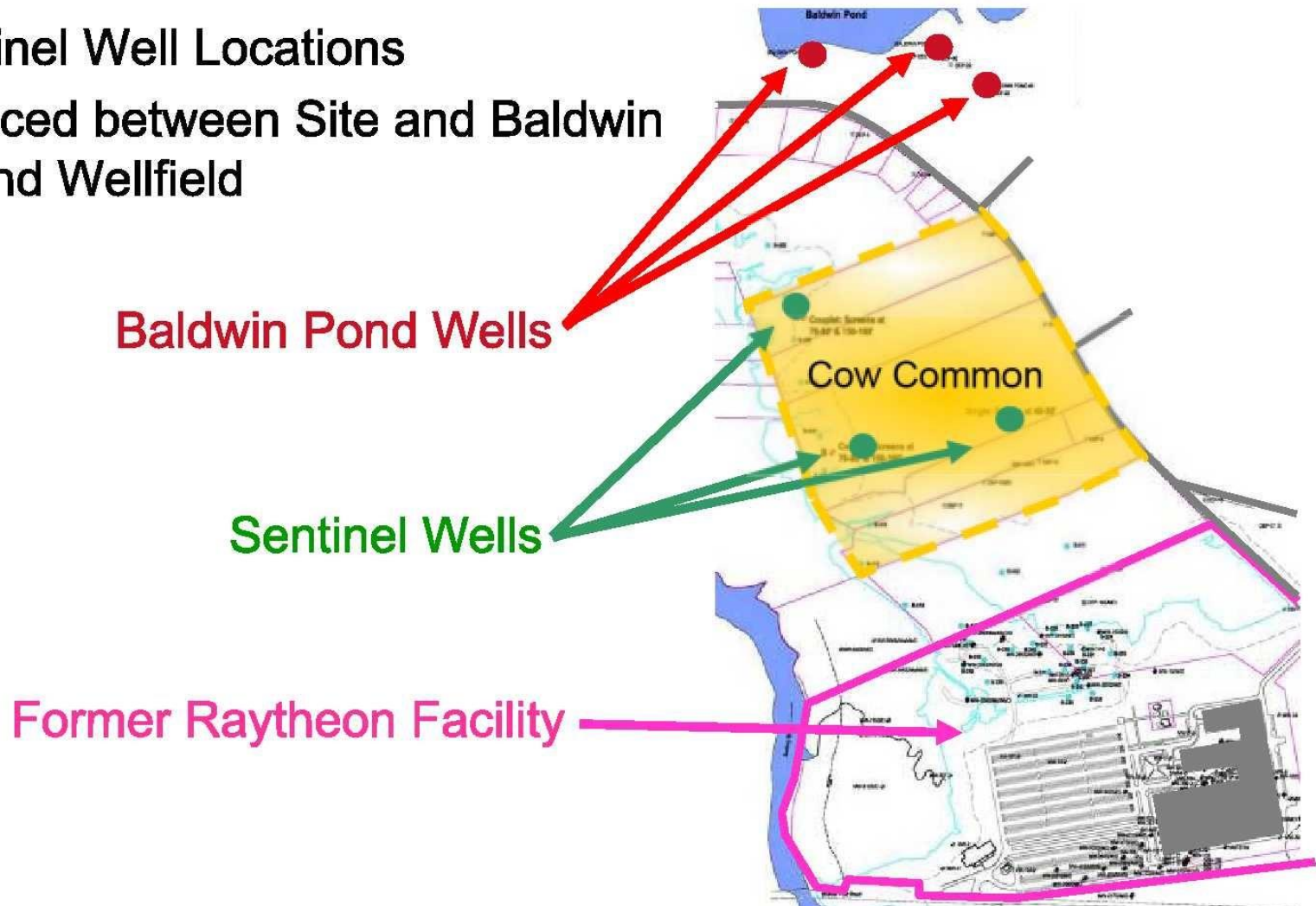




## SEP – Sentinel Wells

### Sentinel Well Locations

- Placed between Site and Baldwin Pond Wellfield



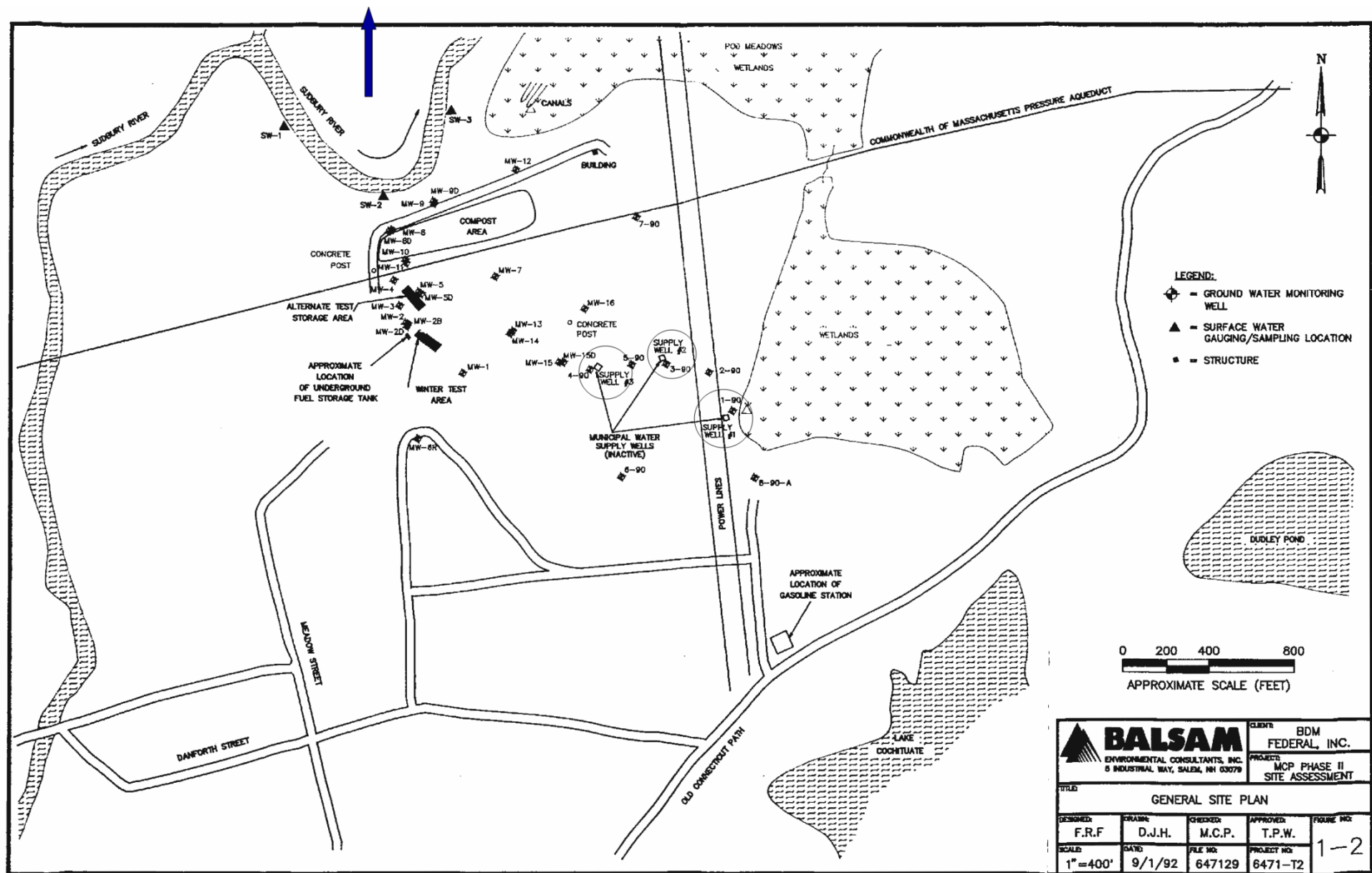
## **OTHER CHANGES**

- **Remediation continued, monitoring status**
- **PIP Plan outdated**
- **After 2010 flood, reduced to one PIP Repository**
- **2011-2012 redevelopment construction**
- **100 monitoring wells decommissioned, reinstalled**
- **By 2012 agreed to one PIP meeting per year**
- **AUL changes**
- **Hamlen parcel to US Fish & Wildlife**
- **Downgradient Status for MtBE plume**
- **“Municipal parcel” outside disposal site**
- **Different 2017 PIP meeting**

## **RTN 3-00629 Former New England Sand & Gravel, Meadow Dr., Framingham, MA**

- **1986 US Air Force, Tier IB, PIP site 1993**
- **Class C RAO 2003**
- **Housing redevelopment 2016+**

# Wayland Meadowview Wellhead



<b>BALSAM</b> ENVIRONMENTAL CONSULTANTS, INC. 5 INDUSTRIAL WAY, SALEM, NH 03079		CLIENT: <b>BDM FEDERAL, INC.</b>	
		PROJECT: <b>MCP PHASE II SITE ASSESSMENT</b>	
TITLE: <b>GENERAL SITE PLAN</b>			
DESIGNED: <b>F.R.F.</b>	DRAWN: <b>D.J.H.</b>	CHECKED: <b>M.C.P.</b>	APPROVED: <b>T.P.W.</b>
SCALE: <b>1" = 400'</b>	DATE: <b>9/1/92</b>	FILE NO.: <b>647129</b>	PROJECT NO.: <b>6471-12</b>






# **FORMER NEW ENGLAND SAND & GRAVEL**

**Protecting Drinking Water – Zone II**

**Framingham: inactive Birch Rd. wells**

**Wayland: inactive Meadowview and active Happy Hollow wells**

- **1986 Air Force release on commercial property**
- **TCE plume towards Sudbury River**
- **1993 PIP Plan**
- **Grassroots citizens organized “Save Our Towns”**
- **April 2003 Planning Bd. housing permit**
- **June 2003 Class C RAO**
- **Wayland appealed housing permit**
- **2005 mitigation negotiated to protect Wayland water supply**
- **Framingham working to reactivate Birch Rd. wells**
- **property ownership changes**
- **housing built 2016+**



LOKER  
CONSERVATION  
AND  
RECREATION AREA  
WAYLAND